

**IN THE UNITED STATES DISTRICT COURT FOR THE  
DISTRICT OF MASSACHUSETTS**

SINGULAR COMPUTING LLC,

Plaintiff,

v.

GOOGLE LLC,

Defendant.

Civil Action No.: 1:19-cv-12551 FDS

**DECLARATION OF ANDREW BRUNS IN SUPPORT OF DEFENDANT  
GOOGLE LLC'S PRELIMINARY CLAIM CONSTRUCTION BRIEF**

I, Andrew Bruns, declare and state as follows:

1. I am an attorney licensed to practice law in the State of California and admitted to practice before this Court. I am an attorney at the law firm of Keker, Van Nest and Peters, LLP and counsel for Defendant Google LLC, (“Google”) in the above-captioned action.
2. I make this Declaration in support of Google’s Preliminary Claim Construction Brief. I have personal knowledge of the facts stated herein and, if called as a witness, I could testify to them competently under oath.
3. Attached as **Exhibit 1** is a true and correct copy of a publication titled “Innovator Joseph Bates” authored by Peter Burrows of Bloomberg Businessweek, published January 31- February 6, 2011.
4. Attached as **Exhibit 2** is a true and correct copy of an excerpt of Plaintiff’s Objections and Responses to Defendant’s First Set of Interrogatories, No. 3, dated December 23, 2020. The portions excerpted here have not been designated as Confidential or Highly Confidential by Singular.
5. Attached as **Exhibit 3** is a true and correct copy of a publication titled “Imperfect Processing: A Functionally Feasible (and Fiscally Attractive) Option, Says Singular Computing” authored by Berkeley Design Technology, Inc., published October 22, 2013.
6. Attached as **Exhibit 4** is a true and correct copy of a publication titled “Why a Chip That's Bad at Math Can Help Computers Tackle Harder Problems” authored by Tom Simonite, published April 14, 2016.
7. Attached as **Exhibit 5** is a true and correct copy of a publication titled “A Survey of Techniques for Approximate Computing” authored by Sparsh Mittal, published in 2015.
8. Attached as **Exhibit 6** is a true and correct copy of a publication titled “Survey on Approximate Computing and its Intrinsic Fault Tolerance” authored by Gennaro Rodrigues, published March 26, 2020.

I declare under penalty of perjury under the laws of the United States of America that the forgoing is true and correct and that this declaration was executed January 8, 2021, at Portland, Oregon.

By: /s/ Andrew Bruns  
Andrew Bruns

**CERTIFICATE OF SERVICE**

I certify that this document is being filed through the Court's electronic filing system, which serves counsel for other parties who are registered participants as identified on the Notice of Electronic Filing (NEF). Any counsel for other parties who are not registered participants are being served by first class mail on the date of electronic filing.

/s/ Nathan R. Speed

Nathan R. Speed